

# ELECTRONIC INFORMATION DISCLOSURE STATEMENT

Electronic Version v18

Stylesheet Version v18.0

## Title of Invention

Method and Apparatus for Using Connection Graphs with  
Potential Diagonal Edges to Model Interconnect Topologies During  
Placement

Application Number : 09/737245



Confirmation Number: 8353

First Named Applicant: Steven Teig, et al.

Attorney Docket Number: SPLX.P0012

Art Unit: 2825

Examiner: Thuan V Do

Search string: ( 4777606 or 5224057 or 5519836 or 5699265 or 6038385 or 6085032 or 6088519  
or 6154874 or 6240541 or 6349403 or 6366279 or 6442745 or 6505331 or 6601227  
or 6651233 ).pn

## US Patent Documents

Note: Applicant is not required to submit a paper copy of cited US Patent Documents

init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
TD	1	4777606	1988-10-11	Fournier			
TD	2	5224057	1993-06-29	Igarashi, et al.			
TD	3	5519836	1996-05-21	Gawlick, et al.			
TD	4	5699265	1997-12-16	Scepanovic, et al.			
TD	5	6038385	2000-03-14	Scepanovic, et al.			
TD	6	6085032	2000-07-04	Scepanovic, et al.			
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TD	8	6154874	2000-11-28	Scepanovic, et al.			
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TD	10	6349403	2002-02-19	Dutta, et al.			
TD	11	6366279	2002-02-04	Gorman	B1		
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TD	13	6505331	2003-01-07	Bracha, et al.	B1		
TD	14	6601227	2003-07-21	Trimberger	B1		
TD	15	6651233	2003-11-18	Teig, et al.			

Signature

Examiner Name	Date
THUAN DO	10-5-05

# ELECTRONIC INFORMATION DISCLOSURE STATEMENT

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Stylesheet Version v18.0

<b>Title of Invention</b>	<b>Method and Apparatus for Using Connection Graphs with Potential Diagonal Edges to Model Interconnect Topologies During Placement</b>
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Search string: ( 4593363 or 4855929 or 5267176 or 5375069 or 5587923 or 5618744 or 5633479 or 5637920 or 5640327 or 5663891 or 5757089 or 5784289 or 5798936 or 5838583 or 5889677 or 5980093 or 6070108 or 6128767 or 6209123 or 6253363 or 6295634 or 6324674 or 6324675 or 6327693 or 6327694 or 6330707 or 6378121 or 6407434 or 6412102 or 6415422 or 6442743 or 6448591 or 6473891 or 6480991 or 6490713 or 6519751 or 6543043 or 6546540 or 6557145 or 6567967 or 6301686 or 6678872 or 6802049 or 20010009031 or 20020182844 or 20030005399 or 20030225205 or 20040123260 or 20030217346 or 20030014725 or 20040044979 or 20020133798 ).pn

## US Patent Documents

**Note: Applicant is not required to submit a paper copy of cited US Patent Documents**

init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
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	2	4855929	1989-08-08	Nakajima			
	3	5267176	1993-11-30	Antreich, et al.			
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Note: Applicant is not required to submit a paper copy of cited US Published Applications

init	Cite.No.	Pub. No.	Date	Applicant	Kind	Class	Subclass
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	2	20020182844	2002-12-05	Igarashi, et al.	A1		
	3	20030005399	2003-01-02	Igarashi, et al.	A1		
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	5	20040123260	2004-06-24	Steven Teig, et al.	A1		
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TPV	8	20040044979	2004-03-04	Aji, et al.	A1		

TP	9	20020133798	2002-09-19	Steven Teig, et al.	A1	/	/
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Signature

*Armando*

Examiner Name	Date
THUAN DO	10-05-2005

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Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE



Substitute for form 1449A/PTO				Application Number	09/737,245
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)				Filing Date	12/13/00
				First Named Inventor	Steven Teig
				Group Art Unit	2825
				Examiner Name	Thuan Do
Sheet	1	of	3	Attorney Docket Number	SPLX.P0012

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OFFICE OF PETITIONS

U.S. PATENTS RELATED TO THE PRESENT APPLICATIONS						
Examiner's Initials	Cite No. <sup>1</sup>	U.S. Patent Document Number Kind Code <sup>2</sup> (if known)		Name of Patentee or Applicant of Cited Document	Date of Publication MM-DD-YYYY	Relation to Present Application
TD	1.	6,516,455	B1	Teig, et al.	02-10-02	CIP of the parent application of the present application

U.S. PATENT DOCUMENTS						
Examiner's Initials	Cite No. <sup>1</sup>	U.S. Patent Document Number Kind Code <sup>2</sup> (if known)		Name of Patentee or Applicant of Cited Document	Date of Publication MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
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	3.	4,615,011		Linsker	09-30-86	
	4.	5,097,422		Corbin, II et al.	03-17-92	
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Examiner Signature	<i>Muendo</i>	Date Considered	9-30-05
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\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

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Substitute for form 1449A/PTO				Application Number	09/737,245
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)				Filing Date	12/13/00
				First Named Inventor	Steven Teig <b>RECEIVED</b>
				Group Art Unit	2825
				Examiner Name	Thuan Do <b>FEB 02 2004</b>
Sheet	2	of	3	Attorney Docket Number	SPLX.P0012 <b>OFFICE OF PETITIONS</b>

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Examiner Initials	Cite No. <sup>1</sup>	Foreign Patent Document			Date of Publication MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Office <sup>2</sup>	Number <sup>3</sup>	Kind Code (if known) <sup>4</sup>		
TD	40.	JP	64-15947		01-19-89	

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Examiner Signature	<i>Quado</i>	Date Considered	9-30-05
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Substitute for form 1449A/PTO				Application Number	09/737,245	<b>RECEIVED</b> <b>FEB 02 2004</b> <b>OFFICE OF PETITIONS</b>
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)				Filing Date	12/13/00	
				First Named Inventor	Steven Teig	
				Group Art Unit	2825	
				Examiner Name	Thuan Do	
Sheet	3	of	3	Attorney Docket Number	SPLX.P0012	

NON PATENT LITERATURE DOCUMENTS				
Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.		
TD	41.	A.H. Farrahi et al., Quality of EDA CAD Tools: Definitions, Metrics and Directions, Quality Electronic Design, 2000, Proceedings of the first International Symposium on March 2000, pp 395-405.		
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TD	43.	G. Overton, EDA Underwriter 2 Finding Space in a Multi-layer Board, Electronic Engineering, Morgan-Granplan LTD, vol. 67, no. 819, pp 29-30.		
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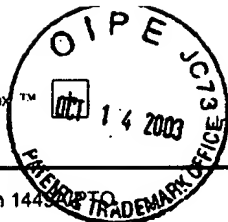
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Substitute for form 1449 <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> (use as many sheets as necessary)				Application Number	09/737,245
				Filing Date	12/13/00
				First Named Inventor	Steven Teig
				Group Art Unit	2825
				Examiner Name	Thuan V. Do
Sheet	1	of	4	Attorney Docket Number	SPLX.P0012

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RELATED U.S. PATENT DOCUMENTS						
Examiner Initials	Cite No. <sup>1</sup>	U.S. Patent Document Number	Date of filing MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Related Application Data	
TD	1.	2002/0133798	12-06-2000	Steven Teig et al.	Parent application; present application is a continuation of 2002/0133798.	
	2.	2002/0100007	12-06-2200	Steven Teig et al.	Application regarding related placement technology.	
	3.	2002/0073390 S/N 09/737,210	12-13-2000	Steven Teig et al.	Continuation of parent 2002/0133798	
	4.	Preliminary Amendment S/N 09/737,210	12-13-2000	Steven Teig et al.	This Preliminary Amendment is submitted as the publication 2002/0073390 does not accurately reflect the claims of S/N 09/737,210	
	5.	S/N 09/737,220	12-13-2000	Steven Teig et al.	Continuation of parent 2002/0133798	
	6.	S/N 09/739,460	12-15-2000	Steven Teig et al.	Continuation of 2002/0100007	
	7.	2002/0124231 S/N 09/739,580	12-15-2000	Steven Teig et al.	Continuation of 2002/0100007.	
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	12.	Preliminary Amendment S/N 09/745,067	12-19-2000	Steven Teig et al.	This Preliminary Amendment is submitted as the publication 2003/0121015 does not accurately reflect the claims of S/N 09/745,067.	
	13.	2002/0069397	01-13-2002	Steven Teig et al.	CIP of 2002/0100007 & 2002/0133798.	
	14.	2002/0170027	02-20-2002	Steven Teig et al.	CIP of 2002/0100007 & 2002/0133798.	
	15.	2002/0157075	02-20-2002	Steven Teig et al.	CIP of 2002/0100007 & 2002/0133798.	
TD ✓	16.	2003/0088841 S/N 10/329,241	12-23-2002	Steven Teig et al.	CIP of parent 2002/0133798	

Examiner Signature	<i>Almando</i>	Date Considered	9-30-05
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Substitute for form 1449A/PTO				Application Number	09/737,245
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)				Filing Date	12/13/00
				First Named Inventor	Steven Teig
				Group Art Unit	2825
				Examiner Name	Thuan V. Do
Sheet	2	of	4	Attorney Docket Number	SPLX.P0012

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OCT 24 2003  
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RELATED U.S. PATENT DOCUMENTS					
TD	17.	Preliminary Amendment S/N 10/329,241	12-23-2002	Steven Teig et al.	This Preliminary Amendment is submitted as the publication 2003/0088841 does not accurately reflect the claims of S/N 10/329,241.
	18.	2003/0079193	12-07-2001	Steven Teig et al.	Application regarding related routing technology
	19.	2003/0018947	12-07-2001	Steven Teig et al.	Application regarding related routing technology
	20.	2002/0147958	10-19-2001	Steven Teig et al.	Application regarding related routing technology
	21.	2003/0063614	01-04-2002	Steven Teig et al.	Application regarding related routing technology
	22.	2003/0064559	01-04-2002	Steven Teig et al.	Application regarding related routing technology
	23.	2003/0063568	01-04-2002	Steven Teig et al.	Application regarding related routing technology
	24.	2003/0101428 S/N 10/040,915	01-05-2002	Steven Teig et al.	Application regarding related routing technology
	25.	Preliminary Amendment S/N 10/040,915	01-05-2002	Steven Teig et al.	This Preliminary Amendment is submitted as the publication 2003/0101428 does not accurately reflect the claims of S/N 10/040,915.
	26.	2002/0166105 S/N 10/040,948	01-05-2002	Steven Teig et al.	Application regarding related routing technology
	27.	Preliminary Amendment S/N 10/040,948	01-05-2002	Steven Teig et al.	This Preliminary Amendment is submitted as the publication 2002/0166105 does not accurately reflect the claims of S/N 10/040,948.
	28.	2003/0023943 S/N 10/040,954	01-05-2002	Steven Teig et al.	Application regarding related routing technology
	29.	Preliminary Amendment S/N 10/040,954	01-05-2002	Steven Teig et al.	This Preliminary Amendment is submitted as the publication 2003/0023943 does not accurately reflect the claims of S/N 10/040,954.
TD ✓	30.	2003/0043827 S/N 10/040,953	01-05-2002	Steven Teig et al.	Application regarding related routing technology

Examiner Signature	<i>Almendo</i>	Date Considered	9-30-05
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Substitute for form 1449A/BTO <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> (use as many sheets as necessary)				Application Number	09/737,245
				Filing Date	12/13/00
				First Named Inventor	Steven Teig
				Group Art Unit	2825
				Examiner Name	Thuan V. Do
Sheet	3	of	4	Attorney Docket Number	SPLX.P0012

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RELATED U.S. PATENT DOCUMENTS					
TD	31.	Preliminary Amendment S/N 10/040,953	01-05-2002	Steven Teig et al.	This Preliminary Amendment is submitted as the publication 2003/0043827 does not accurately reflect the claims of S/N 10/040,953.
	32.	2003/0066042 S/N 10/040,963	01-05-2002	Steven Teig et al.	Application regarding related routing technology
	33.	Preliminary Amendment S/N 10/040,963	01-05-2002	Steven Teig et al.	This Preliminary Amendment is submitted as the publication 2003/0066042 does not accurately reflect the claims of S/N 10/040,963.
	34.	2002/0174412 S/N 10/041,942	01-07-2002	Steven Teig et al.	Application regarding related routing technology
	35.	Preliminary Amendment S/N 10/041,942	01-07-2002	Steven Teig et al.	This Preliminary Amendment is submitted as the publication 2002/0174412 does not accurately reflect the claims of S/N 10/041,942.
	36.	2003/0088844 S/N 10/041,957	01-07-2002	Steven Teig et al.	Application regarding related routing technology
	37.	Preliminary Amendment S/N 10/041,957	01-07-2002	Steven Teig et al.	This Preliminary Amendment is submitted as the publication 2003/0088844 does not accurately reflect the claims of S/N 10/041,957.
	38.	2002/0199165 S/N 10/046,864	01-13-2002	Steven Teig et al.	Application regarding related routing technology. Also, CIP of parent application 2002/0100007
	39.	Preliminary Amendment S/N 10/046,864	01-13-2002	Steven Teig et al.	This Preliminary Amendment is submitted as the publication 2002/0199165 does not accurately reflect the claims of S/N 10/046,864.
	40.	2003/0066043	01-13-2002	Steven Teig et al.	Application regarding related routing technology
	41.	2003/0115566	01-13-2002	Steven Teig	Application regarding related routing technology
TD	42.	2003/0056187 S/N 10/047,982	01-14-2002	Steven Teig et al.	Application regarding related routing technology. Also, CIP of parent application 2002/0100007

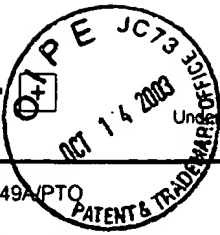
Examiner Signature	Murando	Date Considered	9-30-05
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				Filing Date	12/13/00
				First Named Inventor	Steven Teig
				Group Art Unit	2825
				Examiner Name	Thuan V. Do
Sheet	4	of	4	Attorney Docket Number	SPLX.P0012

RELATED U.S. PATENT DOCUMENTS					
TD	43.	Preliminary Amendment S/N 10/047,982	01-14-002	Steven Teig et al.	This Preliminary Amendment is submitted as the publication 2003/0056187 does not accurately reflect the claims of S/N 10/047,982
	44.	2003/0066044	01-13-2002	Steven Teig et al.	Application regarding related routing technology
	45.	2003/0066045	01-13-2002	Steven Teig et al.	Application regarding related routing technology
	46.	2003/0088845 S/N 10/047,978	01-13-2002	Steven Teig et al.	Application regarding related routing technology. Also, CIP of parent application 2002/0100007.
TD	47.	Preliminary Amendment for S/N 10/047,978	01-13-2002	Steven Teig et al.	This Preliminary Amendment is submitted as the publication 2003/0088845 does not accurately reflect the claims of S/N 10/047,978.

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